

## Background

The Gold King mine is located outside of Silverton on Cement Creek. Commissioned in the 1880's, it was used to extract gold, silver, lead and copper. After a history of sporadic production, the mine was decommissioned in 1991. Although there have been community discussions to add the mine to the EPA Super Fund list, it is not on the list and therefore has not received federal dollars for remediation.

On August 5, 2015, an EPA team working to investigate and address contamination at the mine unexpectedly triggered a large release of mine waste water into the upper portions of Cement Creek. There were several workers at the site at the time of the breach, all were unharmed.

Following the release, the Colorado Department of Public Health and the Environment (CDPHE) notified water users downstream so they could take appropriate steps to turn off water intakes until the contaminated water passed. On August 10, Governor Hickenlooper declared an emergency and allocated \$500,000 from the state's Disaster Emergency Fund to pay for response and technical assistance.

## Sample data and analysis

### Sampling

- The EPA and CDPHE are sampling water quality at various locations along Cement Creek and the Animas River between the Gold King mine and the City of Durango.
- Since the spill, Water samples have been taken and analyzed consistently beginning. Samples will continue to be taken until water quality improves to pre-spill conditions.
- Sampling focused on contaminants typically found in mine drainage including: pH, Mercury, Arsenic, Selenium, Cadmium, Silver, Lead, Uranium, Calcium, Iron, Barium, Molybdenum, Nickel, Boron, Chromium, Silicon, Potassium, Vanadium, Zinc, Manganese, Sodium, Titanium, Strontium, Cobalt, Magnesium, Aluminum, Copper, Beryllium, Nickel, Antimony, Chromium, Cobalt, Magnesium, Potassium, Silver, Sodium, Thallium, Vanadium, and hardness.

### Analysis

- The department continues to evaluate the impact of the mine release on drinking, bathing, hand washing and recreation in Cement Creek and the Animas River.
- Cement Creek continues to have low pH and elevated levels of metals.
- The Animas River shows a downward trend in the level of metals.
- Downstream public drinking water systems do not appear to be impacted by the mine release.

## Health recommendations

*Recommendations may change with new data; please check recommendations daily.*

### General

- Avoid contact with water in Cement Creek until the low pH and elevated levels of metals subside.

- Avoid contact with orange-colored river water, and wash skin with soap and water after any such contact.
- Avoid contact with creek and river sediment, and wash skin with soap and water after any such contact.
- Avoid contact with the yellow substance around creek and riverbeds, and wash skin with soap and water after any such contact.

#### Drinking water

- If you pay your water bill to the City of Durango, your tap water is safe to drink. City staff turned off and blocked the intakes from the Animas River last Wednesday before the plume reached Durango. The pumps will remain off until the Animas is safe. Because the Florida River is now the sole source of drinking water, it is imperative that residents and businesses continue to conserve as much water as possible.
- Private wells and water from unregulated water companies located along Cement Creek and the Animas River should have their water tested for the “metals scan,” listed on this form.
  - When the recommended metals scan analyses for a private water source exceed the maximum contaminant values listed in the tables found in section 11.45 of the Colorado Primary Drinking Water Regulations (Regulation 11, linked here), residents should discontinue use of the source water and seek assistance.
- Visit the San Juan Health Department website for more information about safe drinking water.

#### Recreation

The department does not anticipate adverse health effects from exposure to the metals detected in the Animas River south of Silverton from limited recreational water use without disturbing sediments.

#### Other

Contaminants have varying health effects depending on the specific chemical, level of exposure, and the duration of the exposure. For health information about contaminants, go to this CDC website.

- Anyone who is concerned about exposure to water affected by the mine release should contact their healthcare provider or the Rocky Mountain Poison and Drug Center at 1-800-222-1222.